



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,757	09/10/2003	Swarup Acharya	18-18-18	3481
7590	06/28/2004		EXAMINER	
			TANG, KENNETH	
			ART UNIT	PAPER NUMBER
			2127	

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

BEST AVAILABLE COPY

Office Action Summary	Application No. 10/659,757	Applicant(s) ACHARYA ET AL.	
	Examiner Kenneth Tang	Art Unit 2127	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-26 are presented for examination.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3 and 5 of U.S. Patent No. 6,502,062 in view of Bigo et al. (hereinafter Bigo) (US 5,261,099).

Although the conflicting claims are not identical, they are not patentably distinct from each other because both computer systems comprise substantially the same elements, such as a method for scheduling responses in a point-to-point communication system having a plurality of local channels, receiving a plurality of job requests at a central server for scheduling, and determining an adaptive schedule. The differences between the U.S. Patent No. 6,502,062 and this application is wherein if the first job request is interrupted, an unserved portion of data is returned to the central server, and the unserved portion is subsequently serviced so as to service a second job request in accordance with an updated schedule. However, Bigo teaches an

Art Unit: 2127

adaptive scheduling mechanism of tasks to be performed in a communication system (*see Abstract and col. 15, lines 63-65*), wherein the system is interrupted during a program segment (breakpoint), returned to the central scheduler, and execution is resumed/continued on by another program task at the breakpoint (*col. 1, lines 65-68 through col. 2, lines 1-2, col. 4, lines 29-48*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of resuming execution on a different thread/task when a prior thread is interrupted to the existing system in order to benefit from the benefits and advantages of multi-threading and parallelism, such as increasing the speed and efficiency of thread processing.

4. As to claims 2-26, they are rejected under the judicially created doctrine of obvious type double patenting for the same reasons as stated in the rejection of claim 1 above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-4, 18, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sinibaldi et al. (hereinafter Sinibaldi) (US 6,338,130 B1) in view of Bigo et al. (hereinafter Bigo) (US 5,261,099).**

Art Unit: 2127

6. As to claim 1, Sinibaldi teaches a method for scheduling responses in a point-to-point communication system having k channels, the method comprising the steps of receiving at a central server a plurality of job requests. Sinibaldi also teaches determining an adaptive schedule for the channels (*see Abstract and title, for example*) but fails to explicitly teach, data responsive to said job requests, wherein the servicing of a first job request via a first channel is interrupted, an unserviced portion of said data is returned from a local channel server to said central server, and said unserviced portion is subsequently serviced via a second channel so as to service a second job request via said first channel in accordance with an updated schedule. However, Bigo teaches an adaptive scheduling mechanism of tasks to be performed in a communication system (*see Abstract and col. 15, lines 63-65*), wherein the system is interrupted during a program segment (breakpoint), returned to the central scheduler, and execution is resumed/continued on by another program task at the breakpoint (*col. 1, lines 65-68 through col. 2, lines 1-2, col. 4, lines 29-48*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of resuming execution on a different thread/task when a prior thread is interrupted to the existing system in order to benefit from the benefits and advantages of multi-threading and parallelism, such as increasing the speed and efficiency of thread processing.

7. As to claim 2, Sinibaldi teaches the step of servicing said job requests via a plurality of local channel servers in accordance with said adaptive schedule (*see Abstract and title, for example*).

Art Unit: 2127

8. As to claim 3, Bigo teaches updating the schedule when requested by the central server (*col. 13, lines 22-26, col. 14, lines 34-40, col. 15, lines 63-65*).

9. As to claim 4, it is rejected for the same reasons as stated in the rejection of claim 3. In addition, Bigo teaches using interrupts (*col. 1, lines 28-60*).

10. As to claim 18, Bigo teaches wherein the communication system is an on-line system (*col. 1, line 62*).

11. As to claim 25, it is rejected for the same reasons as stated in the rejection of claim 1.

12. As to claim 26, it is rejected for the same reasons as stated in the rejection of claim 1.

Allowable Subject Matter

13. Claims 5-17 and 19-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (703) 305-5334. The examiner can normally be reached on 8:30AM - 7:00PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt
6/12/04


MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100